

Pesticide Educational Resources Collaborative – Medical (PERC-med)

2nd Quarter Report: June 1, 2019 – August 31, 2019

Second Operational Year: 3/01/19 – 2/28/20

**Cooperative Agreement # X8-83935901
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PERC-Med’s Goal and Objective

The objective of the Pesticide Educational Resources Collaborative for Medical Professionals (PERC-Med) is to help educate the medical community on how to prevent, recognize, and treat pesticide-related health conditions and build on the progress of a previous project titled, “From the Fields to the Exam Room: Integrating the Recognition, Management and Prevention of Pesticide Poisonings into the Primary Care Setting.” This is complementary of the Environmental Protection Agency’s Strategic Plan, Goal 1 – Core Mission, Objective 1.4 - Ensure Safety of Chemicals in the Marketplace: Effectively implement the Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act.

PERC-Med is a cooperative agreement (#X8-83935901) between the U.S. Environmental Protection Agency’s Office of Pesticide Programs and University of California Davis Extension, in collaboration with Oregon State University.

Submitted to:

U.S. Environmental Protection Agency
Office of Pesticide Programs

Submitted on September 30, 2019 by:

Suzanne Forsyth
PERC-Med Administrator and PI

Program Highlights and Summary

Diana Simmes has continued her work in representing PERC-med at stakeholder meetings and events. She attended a lecture on organophosphates by the Medical Toxicology Fellowship Program at Oregon Health & Sciences University. A poster describing paraquat poisoning symptoms was presented by Advisory Board member Diane Rohlman at the 2019 International Society for Agriculture Safety and Health (ISASH) conference in June. The poster was developed by the PERC-med team in collaboration with Diane Rohlman. A PERC-med promotional postcard was developed and distributed at the Western Regional Ag Safety and Health Conference in Seattle, Washington on August 7-9. An abstract describing the PERC-med cooperative agreement was accepted for presentation at the annual Oregon Public Health Association conference on October 14 in Corvallis, Oregon.

Key informant interviews with pesticide experts and practicing clinicians from across the country have been conducted. In-person interviews with Advisory Board members Berman, Karr, and Jenkins have been scheduled for the upcoming quarter. Phone interviews have been scheduled with Advisory Board members Forsyth, Rohlman, Halverson, Schenker, and Laribi. In addition to members of the Advisory Board, the following individuals have informed our gap analysis:

- Greg Blaschke, MD, MPH, FAAP, Oregon Health & Science University (OHSU)
- Sheila Higgins, RN, MPH, COHN-S, North Carolina Department of Health and Human Services (NCDHHS)
- Zane Horowitz, MD, Oregon Health & Science University (OHSU)
- David J. Miller, MS, MPH, United States Environmental Protection Agency (EPA)
- Gale Thomas, MD, North Carolina Farmworker Health Program (NCFHP)
- Robin Tutor, EdD, MPH, OTR, North Carolina Agromedicine Institute
- Jessica Wilburn, MSN, RN, North Carolina Agromedicine Institute
- Melinda Wiggins, MTS, Student Action with Farmworkers (SAF)

Potential partnerships for the promotion of PERC-med resources are under development with healthcare provider organizations including the American Academy of Family Physicians (AAFP) and Association of Public Health Nurses (APHN). Initial conversations are planned for next quarter with Center for Occupational and Environmental Health (COEH) to discuss CME accreditation processes and costs for future online course offerings in collaboration with COEH.

Enhancements have been made to the [PERC-med Resources](#) webpage. A respirator medical evaluation information sheet is currently being developed.

Advisory Board member quarterly activities include the following contributions:

- References to PERC-med materials in Rural Health and Agricultural Medicine course lectures at the University of Iowa and the University of Missouri Kansas City. (Diane Rohlman)
- References to PERC-med resources during webinar presentations related to personal protective equipment and employee education. (Charlotte Halverson)

Objectives and Deliverables

Objective 1: Provide continuing education, training and technical assistance to relevant audiences.

Output A: Training sessions for medical professionals using old and new training models

Anticipated out-comes for Q2	Actual outcomes	Next quarter
	No deliverables at this time.	Track the number of webinars, presentations, or training sessions for medical professionals that are developed, delivered, or distributed by PERC-Med. (Q4)
Track the number and nature of uses/contacts between medical professionals and the resources created and/or distributed. (Q1-Q4)	PERC-med has curated a set of accessible online resources that focus on pesticides and human health issues. The resources webpage received 172 visits this quarter.	Track the number and nature of uses/contacts between medical professionals and the resources created and/or distributed. (Q1-Q4)

Output B: Accredited continuing education courses

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Track the number and nature of continuing education courses for medical professionals created and/or distributed.(Q1-Q3)	PERC-med has curated a set of accessible online resources that focus on pesticides and human health issues. The resources webpage received 172 visits this quarter. The PERC-med team has considered the NC Agromedicine Institute's pesticide education courses for healthcare professionals as potential resources to be added to the resources webpage. The advisory board will review the content on the quarterly call on 9/24/19.	Track the number and nature of continuing education courses for medical professionals created and/or distributed. (Q1-Q3)

Output C: Training sessions for any/all stakeholders other than medical professionals

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Track the number of webinars/presentation s/training sessions for stakeholders other than medical professionals. (Q1-Q3)	Advisory Board member, Diane Rohlman, presented a poster describing paraquat poisoning symptoms and PERC-Med at the International Society for Agriculture Safety and Health (ISASH) conference on June 24-27, 2019 in Des Moines, Iowa. The poster was written by the PERC-med team in collaboration with Diane Rohlman.	Track the number of webinars/presentation s/training sessions for stakeholders other than medical professionals. (Q1-Q3)
Track the number and nature of uses/contacts between all stakeholders (health departments, medical associations, etc.) and the resources created and/or distributed. (Q1-Q4)	<p>PERC-med has curated a set of accessible online resources that focus on pesticides and human health issues. The resources webpage received 172 visits this quarter.</p> <p>Ten contacts have been made among stakeholder groups including:</p> <ul style="list-style-type: none"> • American Academy of Family Physicians (AAFP) • Association of Public Health Nurses (APHN) • North Carolina Agromedicine Institute (2 contacts) • North Carolina Department of Health and Human Services (NCDHHS) • North Carolina Farmworker Health Program (NCFHP) • Oregon Health & Science University (OHSU) (2 contacts in separate departments) • Oregon Poison Control Center (serves Oregon, Alaska and Guam) • Student Action with Farmworkers (SAF) 	Track the number and nature of uses/contacts between all stakeholders (health departments, medical associations, etc.) and the resources created and/or distributed. (Q1-Q4)

Output D: A number of stakeholders receiving technical assistance to integrate the core skills into practice

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Track the number of stakeholders served with technical assistance to integrate the core skills into practice, for example, using apps, online modules and other tools. (Q1-Q4)	PERC-med has not developed and shared resources at this time.	Track the number of stakeholders served with technical assistance to integrate the core skills into practice, for example, using apps, online modules and other tools. (Q1-Q4)

Objective 2: Update existing and/or develop new materials and resource tools.

Output A: A number of tested resources distributed to clinicians and other stakeholders

Anticipated out-comes for Q2	Actual outcomes	Next quarter
	No deliverables at this time.	Track the number of tested resources distributed. (Q4)
Track the number of subscribers for email distribution list(s) (Q1-Q4)	PERC-Med has created an email distribution list to share information and updates. Due to a technical error, the email list subscription was not functioning correctly. Subsequently, zero subscriptions were registered. Other forms of gaining web-traffic and email list subscribers have been suggested. UCDE's Marketing team encouraged us to start a Facebook page campaign to drive visitors to the PERC-med webpage and increase the number of email list subscribers. This is under consideration.	Track the number of subscribers for email distribution list(s) (Q1-Q4)

Output B: A marketing plan that accompanies each resource and tool developed

Anticipated out-comes for Q2	Actual outcomes	Next quarter
	No deliverables at this time.	Track milestones in developing a marketing strategy for PERC-Med. (Q3-Q4)
Track milestones in developing and executing marketing activities for each resource and tool developed. (Q1-Q4)	A PERC-med informational postcard was developed in July. Marcy Harrington of the Pacific Northwest Agricultural Safety and Health Center (PNASH) distributed 50 PERC-med informational postcards at the Western Regional Ag Safety and Health Conference in Seattle, Washington in August 2019.	Track milestones in developing and executing marketing activities for each resource and tool developed. (Q1-Q4)

Output C: One or more new resources developed each project year, such as mobile apps compatible with poisoning surveillance and monitoring systems to more easily report pesticide exposures, materials or resources that promote recognition, diagnosis, treatment and prevention of pesticide-related illness in the practice setting

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Track the number and nature of electronic-only resources developed, such as mobile apps, online courses, and/or databases. (Q1-Q4)	PERC-med has not developed and shared resources at this time.	Track the number and nature of electronic-only resources developed, such as mobile apps, online courses, and/or databases. (Q1-Q4)
Track the number and nature of printable resources developed and/or improved such as clinical toxicology briefs, clinical guidelines and/or checklists. (Q1-Q4)	A printable occupational respirator use and medical evaluation information sheet began development.	Track the number and nature of printable resources developed and/or improved such as clinical toxicology briefs, clinical guidelines and/or checklists. (Q1-Q4)

Output D: A website that is updated and maintained for access to pesticide-related resources and links to partners and tools

Anticipated out-comes for Q2	Actual outcomes	Next quarter
	Improvements include adding resources to the web page for the paraquat poisoning poster described above.	Track milestones in maintaining/improving the website. (Q4)
Track reach / engagement using web analytics (Q1-Q4)	The PERC-med website received 1,712 visits this quarter.	Track reach / engagement using web analytics (Q1-Q4)

Output E: Four or more pesticide-related articles (i.e. case studies, newsletter items, blogs, etc.) developed and/or distributed in relevant media each year, with estimated audiences

Anticipated out-comes for Q2	Actual outcomes	Next quarter
	No deliverables at this time.	Track the number of articles/pieces written/distributed annually. (Q4)
	No deliverables at this time.	Track the approximate reach/engagement/audience for each article/piece (Q4)

Output F: An evaluation strategy/plan to measure effectiveness of outreach activities and/or educational materials

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Track milestones in developing and executing marketing activities (Q1-Q4)	<p>Advisory Board member, Diane Rohlman, presented a poster describing paraquat poisoning symptoms and PERC-Med at the International Society for Agriculture Safety and Health (ISASH) conference on June 24-27, 2019 in Des Moines, Iowa. The poster was written by the PERC-med team in collaboration with Diane Rohlman.</p> <p>A PERC-med informational postcard was developed in July. Marcy Harrington of the Pacific Northwest Agricultural Safety and Health Center (PNASH) distributed 50 PERC-med informational postcards at the Western Regional Ag Safety and Health Conference in Seattle, Washington in August 2019.</p>	Track milestones in developing and executing marketing activities (Q1-Q4)

Objective 3: Conduct outreach to existing and new audiences to use materials and tools.

Output A: A number of stakeholders accessing high-quality pesticide-related training materials

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Measure web traffic to PERC-Med resource collections. (Q1-Q4)	During June through August 2019, the PERC-med resources webpage was accessed 172 times.	Measure web traffic to PERC-Med resource collections. (Q1-Q4)

Output B: A number of stakeholders receiving technical assistance on the availability of pesticide-related training materials

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Track the number of stakeholders served with technical assistance on the availability of pesticide-related training materials. (Q1-Q4)	PERC-med has not developed and shared resources at this time.	Track the number of stakeholders served with technical assistance on the availability of pesticide-related training materials. (Q1-Q4)
Track the number and nature of partnerships to apply technical knowledge in practice. (Q1-Q4)	PERC-med has not developed partnerships with which to apply technical knowledge.	Track the number and nature of partnerships to apply technical knowledge in practice. (Q1-Q4)

Objective 4: Develop partnerships and a sustainable network of stakeholders.**Output A: Two or more strategic meetings organized to promote the recognition, diagnosis, treatment and/or prevention of pesticide-related illness in medical practice settings**

Anticipated out-comes for Q2	Actual outcomes	Next quarter
	No deliverables at this time.	Track the number and nature of strategic meetings attended throughout the year, reportable in Q4. (Q4)
	No deliverables at this time.	Track the number and nature of presentations delivered for/with key stakeholders (Q4)
Track engagement in collaborative resource-prioritization, planning, development, marketing and/or evaluation. (Q1-Q4)	Communication with the Oregon Poison Control and the medical toxicology fellowship program at OHSU (Oregon Health Sciences University) has been initiated with an emphasis on marketing resources and materials. Ideas include collaborating on social media postings to share the existing medical provider stakeholders involved with both of these groups.	Track engagement in collaborative resource-prioritization, planning, development, marketing and/or evaluation. (Q1-Q4)

Output B: A number of new partnerships developed and existing partnerships maintained, and the number of people involved in those partnerships

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Track the number of partnerships and achievements initiated through outreach (Q1-Q4)	PERC-med has reached out to national membership based medical provider organizations including the American Academy of Family Physicians (AAFP) and the Association of Public Health Nurses (APHN) with the goal of developing collaborative efforts.	Track the number of partnerships and achievements initiated through outreach (Q1-Q4)

Output C: Planning and Reporting

Anticipated out-comes for Q2	Actual outcomes	Next quarter
Submit quarterly reports within 30 days of the close of the quarter	<p>The first quarterly report for Year 2 was submitted within 30 days of the close of the quarter on June 28, 2019.</p> <p>This quarterly report includes a summary of expenditures, purchases, and other fiscal activities; a side-by-side comparison of actual accomplishments vs. project accomplishments; proposed timelines/milestones.</p>	Submit quarterly reports within 30 days of the close of the quarter.

Difficulties and Departures

In Q1 we reported our challenge in recruiting a qualified Business Manager for PERC-Med (identified in the proposal and workplan as a Public Education Specialist 1). We are elated to report that we've overcome this challenge by recruiting our new hire, Rebecca Belloso, MPH! Rebecca's educational background in environmental toxicology and public health, along with her work experience with OEHHA at Cal EPA have allowed her to hit the ground running. She is a trusted thought partner and we hope to leverage her skills and aptitude in carrying out PERC-med's mission.

A departure we would like to note is that we have not been giving the green light by our Advisory Board to develop online training as we had proposed in our application. The Board's position has been that there is a sizable body of curriculum available but not necessarily being utilized. The Board has encouraged PERC-med to curate a library of these resources and expend effort in creating a marketing campaign to direct health care providers to that collection. This is why we have not yet utilized any of the budget set aside for curriculum development. PERC-med remains to open to the creation of original content as well as promoting the work of others.

Sub-Awards, Contracts and Other Agreements

As part of its project proposal, UCDE named Oregon State University as a collaborator and therefore was not required to compete this sub-award further. Kaci Buhl serves as the Principal Investigator. The total for Project Year 2019 was budgeted at \$50,000. UCDE recently received two invoices for Q1 and Q2 and payment is still pending. The total expenses for the first two quarters will be \$24,796 are on track with their projected budget. PERC-Med will report the amounts in the reporting table once they have cleared the accounting ledgers.

Amended Annual Budget with Carryover - Project Year One (2018) to Year Two (2019)

Project Year 2019		Original Budget	Carryover Applied from Project Year 2018	Amended Budget
A. Personnel		\$137,516	\$101,686	\$239,202
B. Benefits		\$72,894	\$52,502	\$125,396
C. Travel		\$6,338	\$4,849	\$11,187
D. Equipment		\$0	\$0	\$0
E. Program Supplies		\$2,500	\$1,280	\$3,780
F. Contractual		\$36,000	\$46,000	\$82,000
G. Construction		\$0	\$0	\$0
H. Other		\$38,415	\$33,650	\$72,065
H. Other (indirect exempt)		\$59,506	\$41,523	\$101,029
Total Direct Costs		\$353,169	\$281,490	\$634,659
Total Modified Direct Costs (MTDC)		\$293,663	\$246,985	\$540,648
I. Indirect Costs		\$146,831	\$132,483	\$279,314
Total Expenses:		\$500,000	\$413,973	\$913,973

Quarterly Budget Expenditures – Project Year Two 2019

Project Year 2019	Q1	Q2	Q3	Q4	Cumulative	Amended Budget from above	% Used of Amended
A. Personnel	\$22,986	\$31,378			\$54,364	\$239,202	22.73%
B. Benefits	\$12,195	\$15,225			\$27,420	\$125,396	21.87%
C. Travel	\$1,245	\$1,144			\$2,389	\$11,187	21.36%
D. Equipment	\$0	\$0			\$0	\$0	--
E. Program Supplies	\$0	\$303			\$303	\$3,780	8.02%
F. Contractual	\$0	\$0			\$0	\$82,000	0%
G. Construction	\$0	\$0			\$0	\$0	--
H. Other	\$0	\$0			\$0	\$72,065	0%
H. Other (indirect exempt)	\$0	\$0			\$0	\$101,029	0%
Total Direct Costs	\$36,426	\$48,050			\$84,476	\$634,659	13.31%
Total Modified Direct Costs (MTDC)	\$36,426	\$48,050			\$84,476	\$540,648	15.62%
I. Indirect Costs	\$18,213	\$24,025			\$42,238	\$279,314	15.12%
Total Expenses:	\$54,639	\$72,075			\$126,714	\$913,973	13.86%

Resources used during this period amount to approximately \$126,714 representing 13.86% of the amended award amount for Project Years 2018 & 2019 (Years One and Two.) Additional direct expenses will continue to post in Quarter 3 and will be reflected in subsequent drawdowns and progress reports.